GOVT. COLLEGE OF ENGINEERING AND RESEARCH, AWASARI

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No. GCOEARA/Store/2017-18/3/4 .



INVITATION FOR QUOTATION

Quotation for supply of equipments (for Civil Engineering)

Send your quotation for the following items on the terms and conditions listed below, mentioning our reference letter number, date and due date of quotation on your sealed envelope, on or before **01.02.2018** at 3.00 pm. (The quotations will be opened on 02.02.2018 at 11 AM)

Separate quotations are to be submitted for each the items mentioned below and such envelope must be super scribed with enquiry number and date & time of submission of the quotation for that item.

| Sr.No. | Enquiry No. | Specification | Qty. | Estimate Cost in Rs. |
|--------|----------------|---|------|-------------------------|
| 1 | 314-1 | Direct Shear Test Apparatus | 1 | 100000 |
| 2 | 314-2 | Tile Abrasion Testing machine | 1 | 125000 |
| 3 | 314-3 | Vibration Table | 1 | 100000 |
| 4 | 314-4 | Vibration Machine | 1 | 75000 |
| 5 | 314-5 | Marshall stability test apparatus | 1 | 200000 |
| 6 | 314-6 | Tile (Roofing and Flooring) Flexural Testing Machine | 1 | 90000 |
| 7 | 314-7 | Impact of Jet on Vanes | 1 | 80000 |
| 8 | 314-8 | Centrifugal Pump Test Rig (Single Stage) (Close Circuit) | 1 | 75000 |
| 9 | 514-9 | Flash Point Test Apparatus | 1 | 25000 |
| 10 | 314-10 | Standard Tar Viscometer | 1 | 25000 |
| 11 | 314-11 | Softening Point Test Apparatus | 1 | 25000 |
| 12 | 314-12 | Standard Pentrometer/ Bitumen Penetration Kit | 1 | 25000 |
| 13 | 314-13 | Imhoff Setting Cone with Stand | 2 | 40000 |
| 14 | 314-19 | Digital DO Meter | 2 | 40000 |
| 15 | 314-15 | Noise Level Meter | _ 1 | 20000 |
| 16 | 314-16 | Blaine's permeability apparatus | 1 | 20000 |
| | | Detail scope of supply is as per enclosed sheet | | |
| | | टिप- निविदा दोन लिफाफा पध्दतीने सादर करणे आवश्यक आहे. (तांत्रिक व वाणिज्य). ज्या निविदा तांत्रिक छाननीमध्ये पात्र ठरतील त्यांच्याच वाणिज्यिक निविदा उघडण्यात येतील. तांत्रिक निविदा लिफाफ्यामध्ये खालील कागदपत्रांची पाहणी करण्यात येईल. अ) निविदाकाराच्या आस्थापनेचे नोंदणी प्रमाणपत्र. ब) GST रजिस्ट्रेशन प्रमाणपत्र. क) डिसेंबर २०१७ पर्यंत GST भरल्याचा पुरावा. ड) निविदेतील वस्तू उत्पादित करीत असल्याचा पुरावा (इतर आस्थापनांचे पुरवठा आदेश, देयके). इ) निविदेतील वस्तू चे निविदाकाराचे / उत्पादकाचे Specification sheet / leaflet. फ) पुरवठा करण्यात येणा-या यंत्रसामग्री / उपकरणांच्या क्वालीटी व विक्री पश्चात सेवेबाबत हमीपत्र. ज) निविदाकार स्वतः उत्पादक नसेल तर मुळ उत्पादकाचे बाबतीत वरीलपैकी सर्व कागदपत्रे तसेच निविदाकाराचे मुखत्यारपत्र / वितरक प्रमाणपत्र जोडणे आवश्यक आहे. * वाणिज्यिक निविदेच्या लिफाफ्यामध्ये निविदाकाराचे सर्व समावेशक दर अपेक्षित आहेत. | | |
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Terms & Conditons

- 1 Taxes Inclusive / if extra clearly mention the percentage.
- 2 Delivery period –

3 Payment Terms -

Make & Model -

4 Quotation Validity –

xy – Mention clearly

- 6 Warranty 2 Years from date of installation
- 7 Guaranty-

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- 8 Delivery Charges Free / if extra mention clearly.
- 9 The part supply and its bill will strictly not be entertained.
- 10 If you fail to supply the stores within the specified period, the order will be treated at cancelled without any information.
- 11 The material will be accepted subject at approval(after inspection of the material), If rejected it will be returned to you at your cost.
- 12 The material to be supplied should be strictly according to the specification only.
- 13 Please attach copy of your shop registration certificate and **GST Registration Number** alongwith your quotation, without which your quotation will not be accepted.

(Dr. A.S. Pant) Principal Govt.College of Engineering & Research Awasari Awasari(khurd)

| Sr. | · Name of Equipment | | | |
|-----|--|--|--|--|
| 1 | Direct Shear Test Apparatus: Test rig should able to perform tests as per IS: 2720 part XIII. It should be a motor operated horizontal loading system for shearing the specimen. It should comprise: i) Shear Box assembly made up of corrosion resistant material, 60 mm square, complete with U-bracket, guide pins and spacing screws; ii) Gripper assembly consisting of two plain grid plates, two perforated grid plates, one base plate and one loading pad; iii) Two porous stones, each 6 mm thick, fitting the shear box; iv) Shear box housing complete with two ball roller strips; v) Loading unit with normal loading of 8 kg/cm2 on 60 mm2 specimen; vi) Specimen cutter for a specimen size of 60 X 60 X 25 mm; vii) The unit must be provided with a turret type gear box to get 12 different constant rates of strain: 1.25, 0.625, 0.25, 0.125, 0.05, 0.025, 0.01, 0.005, 0.002, 0.001, 0.0004, and 0.0002mm/min and arrangements to carry out residual shear strength tests; viii) Test rig should be operational with 220V, 50 Hz, single-phase supply; ix) Set of weights: 4 of 0.05 kg/cm2, 1 of 0.1 kg/cm2, 1 of 0.2 kg/cm2, 3 of 0.5 kg/cm2 and 1 of 1 kg/cm2; x) Tension-compression proving ring of capacity 2 kN for carrying out residual | | | |
| 2 | shear strength test; xi) A dial gauge 0.01 × 25 mm Abrasion Testing machine for Tiles: Test rig shall be able to conducts test as per IS: 1237 and IS: 1706, It should consists of the following: - A grinding disc furnished with a replaceable grinding path and rotating horizontally about its vertical axis., A circular tray enclosing, holding device for test specimen., Reduction gear coupled to a motor for operation on 415 V, 50 Hz, 3 phase, AC Supply. Revolution counter. (Preset cumulative). A 7.5 Kg weight, abrasive powder and thickness gauge. | | | |
| 3 | Vibration Table: Vibration Table meant for compacting cement concrete should confirm to IS: 2514. Size of vibrating table top should be 1 m X 1 m for 16 concrete cube moulds of 150 mm size. The table top shall be constructed from steel plate of not less than 10 mm thickness or equivalent material and shall be suitably braced and stiffened to vibrate evenly so that there is no significant variation in the vibration characteristics of the table top. The frequency of vibration for the table operating at its maximum load capacity shall be between 3 000 to 6 000 cycles per minute. The vibration acceleration of the table operating at its maximum load capacity shall not be less than four times the acceleration due to gravity. The table top should be equipped with assembly to hold cube moulds in order to prevent moulds from sliding off the table during operation. | | | |
| 4 | Vibration Machine: Vibration Machine meant for vibrating the cement mortar should confirm to IS: 10080, IS: 4031 (Part VI) and able to produce mix in moulds at a frequency of 12,000 ± 400 cycles per minute. The vibrator should be mounted over coiled springs and the vibrations are developed by means of a revolving eccentric shaft. The centre of gravity of the vibrator, including the cube and mould, should be either at the centre of the eccentric shaft or within 25 mm below it. The machine should facilitate easy assembly and dismantling of the cube moulds. | | | |
| 5 | Marshall Stability Test Apparatus: The apparatus should comprise of: i) A motorized loading unit of capacity 50kN. The load frame should have a fixed speed of 5.08cm per minute and should be operational on 230 Volt A.C.; ii)Compaction pedal with specimen mould holder (01 Number); iii) Compaction Rammers of 4.5kg weigh and free fall of 45.7cm (02 Number); iv)Breaking head assembly with provision to fix flow meter (01 Number); v Specimen mould 10.16cm internal diameter x 7.6cm high with base plate and extension collar (03 Number); v Kit for specimen extraction consisting of load transfer bar, steel ball, specimen extracting plate (01 Number vii)Accessories : Integral type proving ring of capacity = 30 kN, a dial gauge 0.01 x 25mm, stainless steel water bath with false bottom and pyramid shaped lid to accommodates 3 number of marshall specimen, an thermometer $0 - 250^{\circ}$ C (Least count = 1° C) | | | |

खरेदी प्रजित्मा प्रधार्थ अधियानी शासकीय अभिवांत्रिकी य संशोधन महादिया

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| 6 | Tile (Roofing and Flooring) Flexural Testing Machine: Test rig should be as per IS: - 1237-1980 The equipment consist of two bearing rollers and a third self aligning loading roller, all 25 mm., in diameter. The center to cent distance between bearing rollers can be set at 150, 200 or 250 mm., The loading is through double lever loadin system by means of a steady flow of lead shot from a lead shot container to a receiver hung on the lever syster. The rate of flow of lead shot is adjustable as per required rate of loading., The flow of lead shot stops automatically on failure of test specimen and the breaking load can be calculated by multiplying the weight of lead shot in the receiver by the lever ratio i.e. 12., Maximum capacity of the machine is 2 kN., Lever ratio is 1 : 12., Supplied complete with 20 kg lead shot. |
| 7 | Impact of Jet on Vanes: General Requirements: The apparatus should consist of a cylindrical acrylic vessel. Wat is fed through a nozzle and discharged vertically to strike a target carried on a stem which extends through the cover. Force of the jet is measured by the simple calculating moments about fixed fulcrum. Technical Specifications:- Set of Nozzle: 4 mm and 8 mm (Brass), Set of Vanes: Hemispherical, flat and inclined plates, Jet collection tank : 250 mm Diameter Material of Construction for jet collection tank: Perspex, Sump tank capacity : 75 liter with Matt Buffing, Measuring tank (with piezometer) capacity : 35 liter Material of Construction for sump and measuring tank: Stainless Steel-304 with Matt Buffing, Pump : Monoblock type, 0-6C liter/min, Motor 0.5 HP, Piping with necessary Valves and Fittings, Digital Stop Watch with 1/10 second accurac: |
| 8 | Centrifugal Pump Test Rig (Single Stage) (Close Circuit): General Requirements and Technical Specifications: The centrifugal pump should be self priming pump with Stainless Steel body coupled to a 3 Phase 1 HP electrical motor; Test rig should be fabricated out of 16 gauge 25x25 mm CRCS powder coated pipes; Piping and fittings: Fusion PPR piping with SS threading wherever necessary Max. Flow rate: 40 LPM (approx); Max. Head: 4 kg/cm2 (approx); Motor: 1 HP 440 V AC operated; Inlet 25 mm x Outlet 25 mm; Motor and Pump are coupled through variable speed pulley drive which enables speed variation while the pump is running Speed variation: 1:3; Power measurement transmitter with seven segment LED display to measure power consumed by electric motor; Flow rate measurement: volumetric type with digital display; Pressure measurement: Using glycerin filled pressure gauge at suction and discharge end of the pump; Pump speed measurement: Non contact type sensor with pane mounted RPM indicator; Sump Tank: Made up of Acrylic/Plastic, Capacity 75 lit; Measuring Tank: Made up of Acrylic/Plastic, Capacity 50 lit. Control panel to house RPM indicator, pressure gauges and digital flow rate indicator. |
| 9 | Flash Point Test Apparatus: This test apparatus should be suitable for test operation as per IS: 1209. Apparatus should consits of electrical heating system with gas test jet and electric heater, brass test cup with handle, removable cup cover with spring operated rotating shutter, stiner device, flame exposure device, energy regulator. Apparatus should be compatible to 220-230 Volt, 50 Hz, Single Phase, AC Supply. This test apparatus should be supplied with voltage variable temperature controller with digital temperature indicator as well as with a thermometers for temperature range IP 60 C and IP 61 C |
| 10 | Standard Tar Viscometer: This test apparatus should be suitable for test operation as per IS: 1206 (Part II). This viscometer should consist of a chrome plated copper bath, with a drain valve and a central tube to receive the test cup and to position the stirrer. It should be mounted on a stand with leveling feet. Stirrer should have a curved shield and need to be provided with an insulated handle, thermometer socket and swivel support for the valve. This test apparatus should be supplied with electrical heating system equipped with immersion heating elements and dimmerstat for controlling the temperature; 10 mm cup and valve. Apparatus should be compatible to 220-230 Volt, 50 Hz, Single Phase, AC Supply. |

N.P.

खरेदी प्रक्रिया प्रभारी अधिकारी शासकीय अभियांत्रिकी व संशोधन महाविद्यालय भरामयी (जर्द) ज आंक्षेपण कि ज्यो 100 100

| 11 | Softening Point Test Apparatus: This test apparatus should be suitable for test operation as per IS: 1205. The apparatus should consist of heat resistant glass beaker internal dia 8.5 cm X 12 cm depth (approx.); two steel balls each of 9.5mm dia; two tapered brass moulds; two ball guides, ring stand. It should be supplied with a heating unit designed to give temp. rise at 5 Degree Celcius per minute through an energy regulator; an | | | | |
|----|--|--|--|--|--|
| | electrically operated stirrer mounted on a stand with chuck and glass rod for stirring the water in the water bath digital temperature indicator as well as a set of thermometers for temperature range IP 60 C and IP 61 C Apparatus should be compatible to 220-230 Volt, 50 Hz, Single Phase, AC Supply | | | | |
| 12 | Standard Pentrometer/ Bitumen Penetration Kit: This test apparatus should be suitable for test operation as pe IS: 1203. Standard pentrometer (manually operated) should consist of a vertical pillar mounted on a base provided with leveling screws. The head should be fitted with a two speed elevating mechanism for quick and precise positioning of the penetration tip. Penetration should be displayed on a 150mm dial, graduated 400 × 0.1mm increments, equipped with a slipping clutch pointer. Penetration Range: 0 to 400 Pen (40 mm). This apparatus should be supplied with 47.5g standard plunger, 50g and 100g plunger weights. | | | | |
| 13 | Imhoff Setting Cone with stand : Capacity 1000 ml; Outer diameter= 108 mm X Length = 451 mm; Material of cone: colourless natural glass; Graduation Intervals: 0 to 1mL in 0.1mL; 1.to 10mL in 0.5mL; 10 to 40mL in 1mL; 40 to 100mL in 2mL at 250, 500 and 1000mL, cone should be featured with plug to facilitate cleaning. Suitable stand/rack for Imhoff cone must be provided | | | | |
| 14 | Digital Dissolved Oxygen (DO) Meter Range D.O. 0 to 20.0 mg; Resolution D.O. 0.1 mg; Accuracy D.O. 0.1 mg + 1 count; Temp. Compensation 0o C to 50o C Manual; Compensation D.O. + 3%; D.O. Sensor type D.O. Amperometric Gold/Silver membrane; Display 3 1/2 digit LED display; Power 230V A.C. 50 Hz; DO Electrode 1 Nos; D O Membranes 10 nos | | | | |
| 15 | Noise Level Meter: It should have digital display featuring: a wide range of 35 to 130dB; Accuracy: +/-1.5dB; Frequency range: 31.5HZ to 8.5KHZ; Sampling time: 2 times /sec; Power supply: 9V batteries | | | | |
| 16 | Blaine's permeability apparatus: This apparatus should be able to perform finess test on Cement as per IS- 4031(PART-II). This variable flow type air-permeability test apparatus should confirm to IS 5516. It should consists of permeability cell with perforated metal disc, Manometer 'U' type mounted on stand with a built in stop cock, Plunger Rubber stopper, Rubber tube 30cm long. Packet of 12 filter paper discs and a bottle of 100cm3 dibutyiphthalate liquid. Acessories like punch to cut filter paper discs, non-perforated disc and suction bulb should be supplied with this equipment. | | | | |

2.01-18 खरेदी प्रक्रिया प्रभारी अधिकारी

शासकीय अभियांत्रिकी व संशोधन महादिसालव अवसरी (खुर्द), ता.आंबेगाव, जि.पुणे.४१२ ४०५